BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Estimate for Improvements to Roads and drains and Asphalting to Varadarajnagar Main road in Ward No. 11(Kuvempunagara) in Vidyaranyapura Sub Division

			Est Cost Rs.					3000000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork **excavation by manual means in ordinary** soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 142 / Item No. 19.1, PWD SR 2016-17**	cum							
	Drain Desilting								
	Varadrajnagar 2nd stage road W0079		2	140.00	0.45	0.35	44.10		
	Berm Cutting								
	Varadrajnagar main road W0079		2	140.00	1.20	0.25	84.00		
	Varadrajnagar main road W0099		2	150.00	1.35	0.20	81.00		
	Varadrajnagar cross road W0036		2	80.00	1.20	0.20	38.40		
	cross road w0071		2	75.00	1.35	0.20	40.50		
	for drain		1	100.00	0.75	0.70	52.50		
	for Cd		3	5.00	2.00	1.20	36.00		
							376.50	199.36	**75061.00**
	Basic Rate	82.00							
	Add loading and unloading Charges **It No 17.1 KSRRB M 100-1**	68.00							
	Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.28 T X 11.90Km X 2.5 / km= 38.08	38.08							
		188.08							
	Area Weightage @6%	11.28							
	Total	**199.36**							
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) **Page No. 25 / Item No. 5.33 PWD SR 2016-17**	Sqm							
	Varadrajnagar main road W0079		2	145.00		1.35	391.50		
	Varadrajnagar cross road W0036		2	40.00		1.35	108.00		
							499.50	80.56	**40240.00**
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB 4-1.3 : Providing and laying in position **ain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.3 of PWD SR 2016-17**	Cum							
	for culvert		3	5.00	1.80	0.15	4.05		
	for flagging course		2	150.00	0.30	0.10	9.00		
	for drain		1	100.00	0.75	0.15	11.25		
							24.30	5159.02	**125364.00**
	Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
4	KSRB 5-14.1 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **Page No. 25 / Item No. 5.27.1, PWD SR 2016-17**	Sqm							
	flagging course main road drain		2	150.00		0.40	120.00		
	cross road		1	100.00		0.40	40.00		
							160.00	993.22	**158915.00**
	Basic Rate	937.00							
	Area Weightage @ 6%	56.22							
	Total	**993.22**							
5	KSRB 5-15 : Providing and constructing non load bearing wall with solid concrete blocks of size 400x100x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **Page No. 25 / Item No. 5.28, PWD SR 2016-17**	Sqm							
	flagging course		2	150.00		0.40	120.00		
			1	100.00		0.40	40.00		
							160.00	758.96	**121434.00**
	Basic Rate	716.00							
	Area Weightage @ 6%	42.96							
	Total	**758.96**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.9, PWD SR 2016-17**	Cum							
	for culvert		3x2	5.00	0.60	0.90	16.20		
							16.20	5305.30	**85946.00**
	Basic Rate	5005.00							
	Area Weightage @ 6%	300.30							
	Total	**5305.30**							
7	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation, plinth and cills**, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.6 PWD SR 2016-17**	Cum							
	for culvert coping		3	5.00	1.80	0.10	2.70		
	Ramp		6	5.00	1.00	0.15	4.50		
	for drain ramp main road		2	150.00	0.30	0.12	10.80		
	for drain coping cross road		2	80.00	0.70	0.075	8.40		
							26.40	5767.46	**152261.00**
	Basic Rate	5441.00							
	Area Weightage @ 6%	326.46							
	Total	**5767.46**							
8	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete **Page No. 25 / Item No. 5.30 PWD SR 2016-17**	No							
			2	150.00			**667**		
				No of stones			**667**	331.78	**221187.00**
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							
	Total	**331.78**							
9	Providing **precast slab of 230 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	RCC Drain Slab		3	5.00	1.50		22.50		
							22.50	5125.00	**115313.00**
10	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate	Sqm							
	Drain covering slabs to main road W0079		2	150.00	0.90		270.00		
							270.00	1760.00	**475200.00**
11	KSRRB 300-47. **Scarifying kankar / gravel /** metal crust upto 150mm thick with pick axes and disposal of stuff including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **Page No. 147 / Item No. 19.53 PWD SR 2016-17**	Sqm							
	Varadrajnagar main road W0079		2	175.00	1.20		420.00		
	Varadrajnagar cross road W0036		1	150.00	4.50		675.00		
	cross road W0071		2	75.00	1.00		150.00		
	cross road		1	75.00	4.50		337.50		
							1582.50	26.50	**41936.00**
	Basic Rate	25.00							
	Area Weightage @ 6%	1.50							
	Total	**26.50**							
2	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 158 / Item No. 20.18, PWD SR 2016-17**	Cum							
	Varadrajnagar main road W0079		2	175.00	1.20	0.20	84.00		
	Varadrajnagar cross road W0036		1	150.00	5.00	0.20	150.00		
	cross road W0071		2	75.00	1.00	0.20	30.00		
	cross road		1	75.00	4.50	0.20	67.50		
							331.50	1768.08	**586119.00**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
13	KSRRB M500-6. Providing and applying **primer** coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 161 / Item No. 21.6, PWD SR 2016-17**	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Varadrajnagar main road W0079		1	175.00	5.50		962.50		
	aradrajnagar cross road W0036		1	150.00	5.00		750.00		
	cross road W0071		1	75.00	4.00		300.00		
	cross road		1	75.00	5.00		375.00		
							2387.50	27.56	**65800.00**
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5 % VG-30 Bitumen **Page No. 165 / Item No. 21.22.6, PWD SR 2016-17**	Cum							
	Varadrajnagar main road W0079		1	175.00	5.50	0.040	38.50		
	Varadrajnagar cross road W0036		1	150.00	5.00	0.040	30.00		
	cross road W0071		1	75.00	4.00	0.040	12.00		
	cross road		1	75.00	5.00	0.040	15.00		
							95.50	7270.54	**694337.00**
	Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							
	KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. **Page No. 122 / Item No. Item No. 15.80, PWD SR 2016-17**	Sqm							
			2	150.00		0.40	120.00		
	Basic Rate	26.00					**120.00**	27.56	**3307.00**
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
16	KSRB 15-20.1 : Providing and applying floor painting with ready mix paint in two coats (exluding priming coat) on new concrete / asbestos cement sheet / plastered surfaces brushing to give an even shade after preparing the surface after throughly cleaning oil, dirt, dust other foreign matter and sand papering including cost of materials, labour, complete as per specifications **Page No. 122 / Item No. Item No. 15.83, PWD SR 2016-17**	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			2	150.00		0.40	120.00		
	Basic Rate	50.00					**120.00**	53.00	**6360.00**
	Area Weightage @ 6%	3.00							
	Total	**53.00**							
	Sub Total								**2968780.00**
	Third Party Inspection Charges @ 1%								**29688.00**
	Add for unforseen and rounding off	L/S							**1532.00**
								Total	**3000000.00**

Rupees Thirty Lakh(s) Only

ertificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2016-17.
3 This work included under 2016-17 POW Grant.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Administrative Approval
Accorded For ....30.00 lakh Rs.
Head of A/C.....P1771
CER NO :.....123..... Dt:..12/01/17

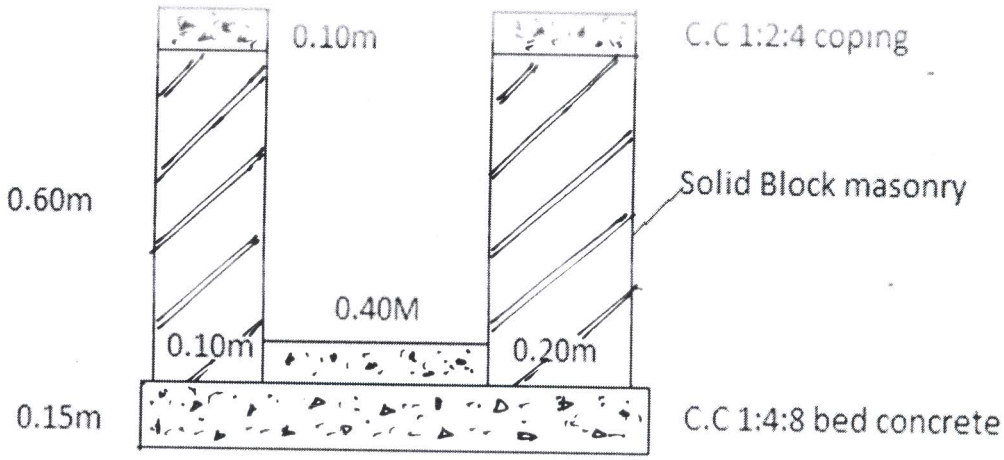
TA CE (YNK)

Technical Sanction
Accorded For ....30.00 lakh Rs.
Head of A/C.....P1771
CER NO :.....106..... Dt:..12/01/17

TA CE (YNK)

Name of work : .....

.....

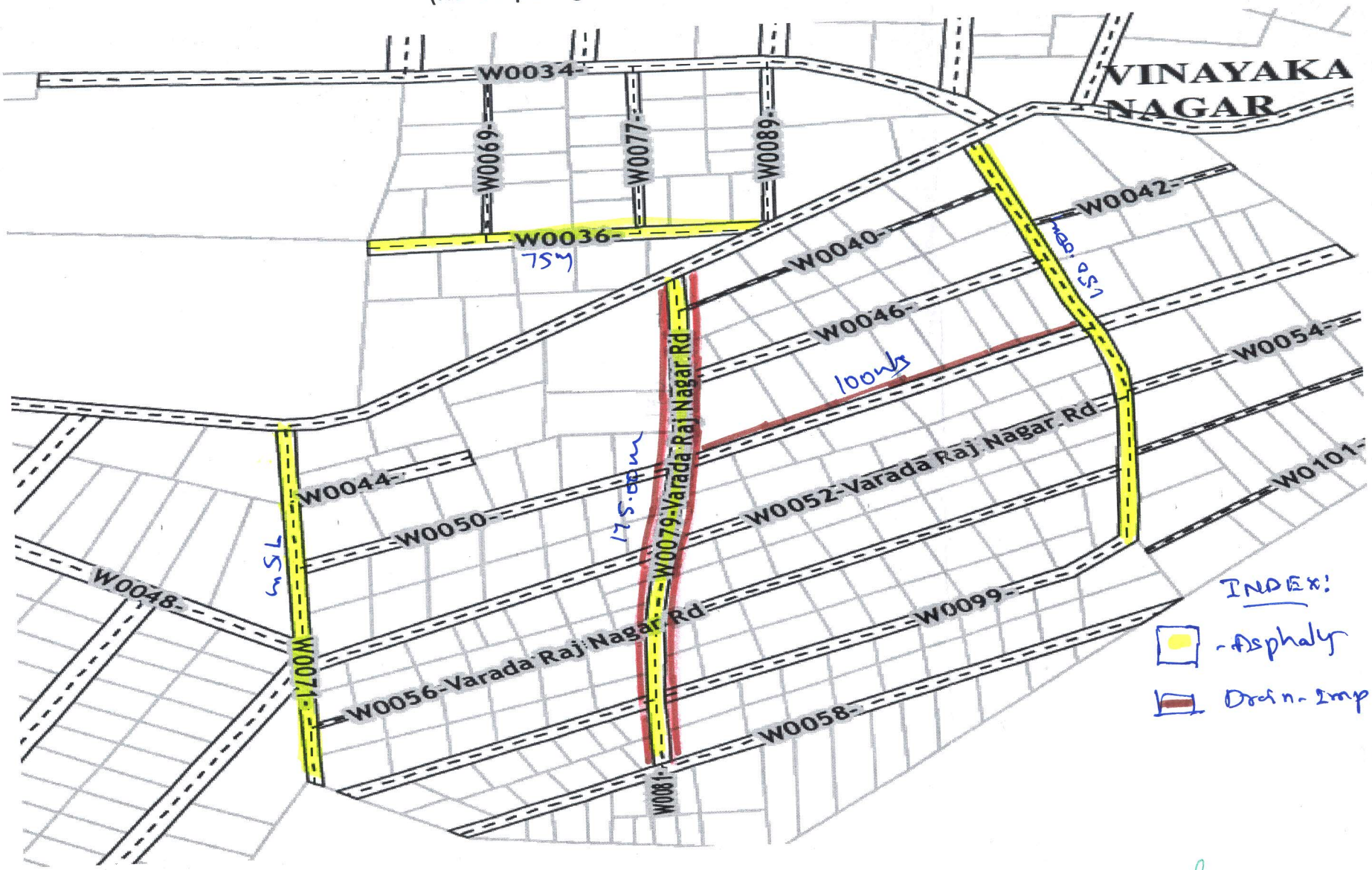


Cross section of Drain

Assistant Engineer
Ward no 11

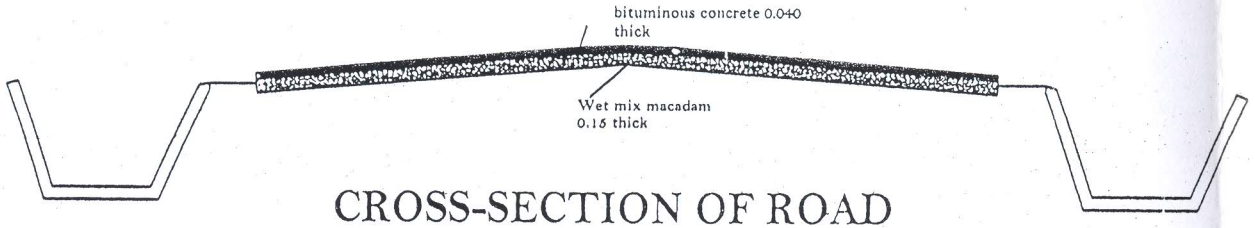
Assistant Executive Engineer
Vidyaranyapura Sub Division

Name of work : Improvements to Roads and drain and Asphalting to Varadrajnagar main road in ward No 11 (Kuvempunagar) in Vidyaranyapura Sub Division



Assistant Engineer
Ward No 11

Assistant Executive Engineer
Vidyaranyapura Sub Division



CROSS-SECTION OF ROAD

INDEX

Wet mix macadam

bituminous concrete

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ. ಸಾ. ಬೆಂಗಳೂರು

ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ